Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Petitions for Rulemaking Regarding the Citizens Broadband Radio Service	)	RM-11788
	)	RM-11789
	)	
Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band	)	GN Docket No. 12-354

REPLY COMMENTS OF NOKIA

Nokia submits these reply comments in response to the comments submitted in the above-captioned proceedings regarding petitions for rulemaking to modify the rules for the new Citizens Broadband Radio Service (CBRS) in the 3550-3650 MHz band. These reply comments reiterate support for certain proposals in the docket which Nokia supported in its initial comments,[1] and voices support for the proposal of the Wireless Innovation Forum (WInnForum) to modify the technical service rules of commercial weather radar systems licensed in the adjacent 3500-3550 MHz band to ensure the success of the new CBRS band.

Nokia cautions with respect to all proposals, however, the need to continue the strong momentum to commence deployment in the 3.5 GHz band, and urges that the Commission implement any proposed rule changes in a way that will not cause delay.

[1] Nokia's Comments were timely submitted in RM-11788 and RM-11789 (and served on the Petitioners) on July 24, 2017. Nokia's Comments were submitted in GN Docket No. 12-354 on August 1, 2017, as the initial filing inadvertently omitted reference to that docket number.

I. REVISING THE COMMISSION'S RULES GOVERNING THE 3.5 GHZ BAND WILL FACILITATE GREATER DEPLOYMENT IN THE BAND

Nokia advocates that the Commission take a balanced approach to service rules in the 3.5 GHz band by providing greater certainty that would facilitate larger deployments while continuing to promote policies that will promote micro-deployments.

CTIA and T-Mobile seek changes to the Priority Access License (PAL) terms that will provide greater stability and investment incentives for the 3.5 GHz band. Intensive use of the band by the carrier community is critical as it will ensure a robust equipment ecosystem, creating economies of scale and driving down user device costs.

Nokia continues to support proposals to lengthen licenses terms for PALs to 10 years and to institute an expectation for renewal. The current three-year terms, without renewal expectation, create uncertainty that threatens the business case for robust investment in the band. Nokia also agrees that geographic license sizes should be increased to support broader deployments, while also recognizing the importance of facilitating micro-deployments through secondary market transactions and other means. To meet both needs, Nokia suggests that the Commission consider auctioning larger geographic licenses (such as Partial Economic Areas) along with licenses sized to promote micro-deployments.

Nokia supports permitting all available PALs to be assigned (rather than the number of available PALs minus one), as well as proposals that SAS Administrators not be required under the rules to disclose Citizens Broadband Radio Service Device (CBSD) registration information). Nokia further supports relaxed emissions limits (as proposed by Qualcomm) to permit wider channels in the band, so long as the rule change does not result in slowing down Commission authorization to commence service in the 3.5 GHz band.

II. MODIFICATIONS TO WEATHER SATELLITE SERVICE RULES IN THE ADJACENT BAND WOULD REDUCE INTERFERENCE INTO NEW CBRS SERVICES

Nokia supports the proposal by the WInnForum that the Commission incorporate interference rules to protect the CBRS ecosystem, including PAL and General Authorized Access users, from commercial weather radar systems licensed on a secondary basis in the adjacent 3500-3550 MHz band.

Nokia further agrees with the WInnForum that under the current rules guiding these high-power radar systems, there will be challenges to CBRS operations where these radar systems are deployed. Indeed, the out-of-band emissions (OOBE) from these radar systems into the adjacent CBRS band are sufficiently high to result in base station shut down or even damage. The radar characteristics may also result in false positive detections by Environmental Sensor Capability (ESC) networks, thus impacting operation of CBRS stations that rely on the ESC to mitigate interference into the incumbent Department of Defense radars.

Consistent with the WInnForum's proposal, Nokia urges the Commission to create certainty for CBRS operations and commercial weather radars alike by adopting the following measures:

1. Weather radars should include filters to mitigate interference to CBRS band;
2. Weather radars should be licensed below 3540 MHz to provide a guard band with the CBRS band;
3. Section 90.175 of the Commission's rules should be modified to require frequency coordination with ESC operators within 150 km of proposed radiolocation stations operating in the 3500-3550 MHz band; and
4. A neutral frequency coordination body should be established to conduct coordination.

III. CONCLUSION

For the foregoing reasons, Nokia urges that the Commission to modify its rules consistent with these Reply Comments.

Respectfully submitted,

/Brian Hendricks/

Prakash Moorut
Nokia Bell Labs

Brian Hendricks
Jeffrey Marks
Government Relations
Nokia
1100 New York Avenue, NW
Suite 705 West
Washington, DC 20005

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